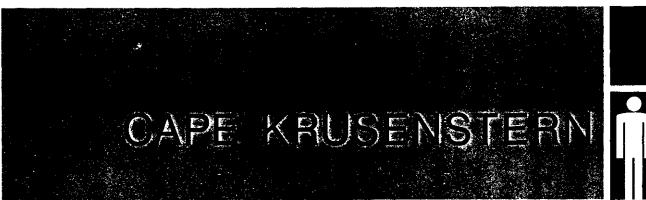
# final environmental impact statement wilderness recommendation





NATIONAL MONUMENT / ALASKA

#### ALTERNATIVES, INCLUDING THE PROPOSED ACTION

This section describes the proposed action and three alternatives for possible wilderness designation at Cape Krusenstern National Monument. It also includes a map of lands considered for designation under each alternative, and a table summarizing the scenarios. The scenarios identify and locate possible development actions in relationship to wilderness areas being considered under the alternatives; they are based on proposals in the General Management Plan, activities and developments identified by the public during the scoping process (see the "Consultation and Coordination" section for scoping information), and projections by the Park Service based on current trends in visitor use. The scenarios are not National Park Service proposals; rather they are professional judgments about what developments and uses might occur over the next 30 to 40 years, based on existing information and trends projected under each alternative. They have been developed for the purpose of analyzing possible environmental impacts in the DEIS to meet the intent of the National Environmental Policy Act of 1969. A summary comparison of environmental impacts is presented at the end of the section.

## WILDERNESS SUITABILITY

No lands in Cape Krusenstern National Monument were designated wilderness by ANILCA. Based on the wilderness suitability review included in the 1986 General Management Plan, 633,587 acres, or approximately 96 percent of the monument lands, have been included in the study area (see Study Area map). These lands meet the criteria for designation as defined in the 1964 Wilderness Act and NPS policies for wilderness areas.

Areas not eligible for wilderness designation include 19,747 acres in the Red Dog Mine road easement and 113 acres in two trail easements between Kivilina and Noatak. In addition, 5,760 acres of NANA Regional Corporation land near the Red Dog Mine port site and 600 acres of corporation subsurface estate lands near Mud Lake were found unsuitable for wilderness because future uses of these lands would be incompatible with wilderness values.

The area determined to be suitable for wilderness includes about 41,750 acres of federally owned lands that are under application for native allotments or have been selected by native regional or village corporations under ANCSA but have not been conveyed. These lands are technically suitable for wilderness designation because they are undeveloped and possess important wilderness values, and they are included in the areas considered for wilderness in the three action alternatives. However, if these lands are conveyed, their management, development, and use will be determined by corporation members and allotment holders; any proposals for such lands are unknown at the present time. Only lands that are wholly federally owned can be designated wilderness. Any of the above native selected lands that are not conveyed will remain in federal ownership and will be included in the wilderness area.

The area determined to be technically suitable for wilderness also includes about 80,278 acres of nonfederal land. This land consists of approximately 353 acres of state-owned land at the northern edge of the monument, about 10,097 acres of state-owned submerged lands in Kotzebue Sound east of Sheshalik Split, 75 parcels of native allotments located primarily along the southern and western coastlines (about 7,651 acres), and about 62,177 acres owned by NANA Regional Corporation. These lands are undeveloped and possess important wilderness values, and some or all of the lands, depending on the alternative, are considered as potential wilderness additions. These lands could be designated wilderness, however, only if they became wholly federally owned.

## BRIEF DESCRIPTION OF THE STUDY AREA

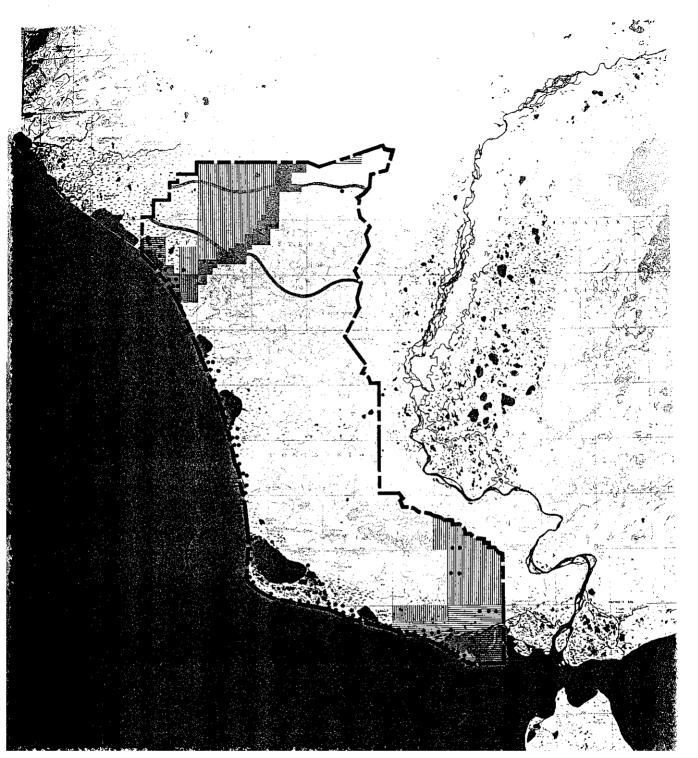
The study area, which encompasses the 633,587 acres determined to be technically suitable for wilderness designation, is north of Kotzebue and above the Arctic Circle. It is characterized by a coastal plain dotted with sizable lagoons and backed by gently rolling, limestone hills. On the east the coastal plain meets an ancient sea cliff now mantled with tundra and blue-gray limestone rubble. The monument's highest point is Mt. Noak (elevation, 2,010 feet) in the Igichuk Hills in the southeastern portion of the monument.

The study area includes the coastal area at Cape Krusenstern, which is comprised of a series of beach ridges that contain archeological sites depicting every known cultural period in arctic Alaska over the last 6,000 years. Protection of the beach ridge complex is a primary purpose of the monument. The beach ridges are known to contain exceptional resources for analyzing and interpreting the lifecycles and technologies that have ensured human survival in the Arctic over the past 6,000 years.

The entire study area is within the larger Cape Krusenstern National Historic Landmark and the Cape Krusenstern Archeological District, which is listed on the National Register of Historic Places. Sixteen native cemetery and historic sites that have been applied for in accordance with ANCSA, section 14 (h) (1), are also located in the study area.

Along the shoreline shifting sea ice, ocean currents, and waves have formed, and continue to form, spits and barrier islands that are considered important for their scientific, cultural, and scenic values. These same oceanic forces are integral to the dynamic nature of the beach ridges and the annual opening and closing of lagoon outlets.

The broad plain between the hills of the cape and the hills in the central portion of the study area is a tundra-covered bed of an Illinoian glacier formed 250,000 years ago. A glacial esker, or gravel ridge marking the bed of a subglacial stream, is evident here, and an esker of this age is considered rare.



Study Area Suitable for Wilderness



Not Suitable for Wilderness



Monument Boundary



Land Selection, Native and State—includes subsurface and surface estates



Native and State-Owned Lands-includes subsurface and surface estates

Small Tract Entries—includes native allotments, homesites, T&Ms etc.

Note: Nonfederal lands within the study area would not be eligible for wilderness designation unless acquired by the federal government.



# STUDY AREA



CAPE KRUSENSTERN NATIONAL MONUMENT / ALASKA U.S. Department of the Interior/National Park Service

A variety of permafrost features--including thaw lakes, ice wedge polygons, pingos, frost mounds, and solifluction lobes--are evident in the lowland areas. These are collectively known as thermokarst topography.

Moist tundra, wet tundra, and alpine tundra are the primary vegetation communities in the study area. In the southeastern portion of the monument small, isolated stands of white spruce trees grow in valleys that afford protection from cold onshore winds.

Five arctic river systems lie entirely within the study area. These streams support four species of whitefish that are important to subsistence users. Arctic char, also important for local use, spawn in Rabbit, Jade, and Kilikmak creeks and the Situkuyok River. Salmon inhabit Rabbit Creek, the unnamed creeks that feed Tasaychek Lagoon, and the unnamed creeks that descend from the south face of Mt. Noak.

The study area provides important habitat for terrestrial mammals, including caribou, moose, musk-oxen, Dall sheep, grizzly bears, wolves, foxes, weasels, and wolverine. Caribou winter on lands north of the Igichuk Hills. Musk-oxen migrate in and out of the area but are primarily found in the Mulgrave Hills and near Imikruk Lagoon. Small numbers of Dall sheep occasionally inhabit the Igichuk Hills. Arctic foxes use the entire study area throughout the year.

Arctic peregrine falcons (Falco peregrinus tundrius), a threatened species, have occasionally been sighted in the study area.

The study area also provides habitat for various species of seabirds, and at least six seabird colonies are in the area. Waterfowl nesting habitat covers more than half the area, and the entire shoreline lies along migration routes of numerous bird species.

#### ALTERNATIVES AND RELATED DEVELOPMENT AND USE SCENARIOS

The four alternatives for wilderness designation are based on the National Environmental Policy Act (NEPA), the Wilderness Act, wilderness suitability determinations from the Cape Krusenstern General Management Plan, and public comments made during the scoping process for this DEIS for the wilderness recommendation. The four alternatives evaluated include:

<u>Alternative 1: No Action</u> - No lands would be considered for wilderness designation.

Alternative 2: Proposed Action - Approximately 465,007 acres (or about 74 percent of the study area) would be recommended for wilderness designation and approximately 2,193 acres (less than 1 percent of the study area) would be recommended as a potential wilderness addition. Approximately 166,387 acres of suitable land in the northwestern corner, southeastern corner, and southern coastal area would be excluded from the recommendation.

Alternative 3: Majority Wilderness - Approximately 516,003 acres (or 81 percent of the study area) would be considered for wilderness designation and approximately 23,660 acres (about 4 percent of the study area) would be considered as a potential wilderness addition. Approximately 93,924 acres of suitable land in the northwestern corner and around Sheshalik Spit would be excluded from consideration.

Alternative 4: Maximum Wilderness - Approximately 553,309 acres (or about 87 percent of the study area) would be considered for wilderness designation and approximately 70,181 acres (about 11 percent of the study area) would be considered as a potential wilderness addition. Submerged lands in Kotzebue Sound east of Sheshalik Spit would be excluded from wilderness.

Included in each alternative is a scenario of possible developments and uses on lands in the study area over the next 30 to 40 years. As stated earlier, these scenarios are not National Park Service proposals; they are estimates, based on professional judgments, of reasonably foreseeable actions under projected trends, and they have been included in this document for the purpose of evaluating the impacts of the alternatives to meet the intent of NEPA. All the possible developments and uses described in the alternatives are allowable in wilderness under ANILCA and the Wilderness Act, with certain constraints.

#### Alternative 1: No Action

Under the no-action alternative no lands would be considered for wilderness designation (see Alternative 1 map). Lands within the study, area would be managed as described in the <u>General Management Plan</u> and in accordance with approved NPS policies for the management of natural areas.

Ranger stations would be constructed as proposed in the <u>General Management Plan</u>, one at Imik Lagoon and one at Aniak, approximately 1 mile west of the Tukrok River mouth. Each would be approximately 500 square feet and would serve as an office and residence for one to three rangers. The Aniak ranger station would be used only during summer, while the Imik Lagoon ranger station would operate year-round. Electricity would probably be supplied by portable generators operating intermittently at Aniak and Imik Lagoon. The ranger stations would each be one story and wood-sided, with the colors of the walls and roofing designed to blend with the surrounding land.

Other possible development includes the following:

one docking facility, 8 feet by 20 feet, for amphibious aircraft at lmik Lagoon to support ranger activities, with aircraft taking off and landing approximately once per day